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IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF UTAH, CENTRAL DIVISION

THORNE RESEARCH, INC. and SOFTGEL FORMULATORS, INC.,

Plaintiffs,

vs.

ATLANTIC PRO-NUTRIENTS, INC., d/b/a/XYMOGEN,

Defendant.

Case No. 2:13-cv-00784

ATLANTIC PRO-NUTRIENTS, INC., D/B/A XYMOGEN'S RESPONSIVE CLAIM CONSTRUCTION BRIEF

Assigned to Magistrate Judge Paul M. Warner

I. INTRODUCTION

Thorne Research, Inc.'s and Softgel Formulators, Inc.'s (collectively "Thorne" or "Plaintiffs") proposed construction for "non-crystalline" is inconsistent with the prosecution history of U.S. Patent No. 8,491,888 (the "888 Patent"). And Thorne's proposed construction for "carrier oil" eliminates any requirement that the carrier oil be a carrier. For these reasons, Thorne's proposed constructions should not be adopted by this Court.

II. NON-CRYSTALLINE

Term	XYMOGEN'S Proposed Construction	Thorne's Proposed Construction
"non-crystalline"	Lacking crystals	Lacking crystals visible by light microscope at magnifications of 640x.

As discussed in XYMOGEN's opening brief, the plain meaning of non-crystalline means that there are no crystals. Thorne does not seem to dispute this, yet Thorne's construction adds an additional requirement that the lack of crystals is limited by inspection with a light microscope at 640x magnification. That additional requirement in Thorne's proposed construction is unnecessary and legally incorrect, and is an attempt to recapture claim scope that the applicant gave up during patent prosecution.

As discussed in XYMOGEN's opening brief, during the prosecution of the '888 Patent, the examiner at the US Patent Office interpreted the term "non-crystalline" as an "absolute limitation barring crystals from the composition." (Ex. D of opening brief, Non-Final Rejection dated July 22, 2010, at 3; emphasis added) The applicant agreed with the examiner's understanding, and in fact adopted that interpretation to argue that a certain piece of prior art,

Udel, did not disclose the non-crystalline limitation: "Ultimately, the Udel Patent does not discloses *a complete lack of crystals*, *as claimed in the instant claims* ..." (*Id.* at 7) (emphasis added)

A "complete lack of crystals" is incompatible with Thorne's proposed construction that a composition be considered non-crystalline only if the lack of crystals is measured by light microscope at 640x magnification. That no crystals can be seen in the visible light spectrum at 640x leaves open the possibility of crystals visible at higher magnifications or in different spectrums. If crystals are detected by a method other than light microscope at 640x magnification, then there is *ipso facto* not a complete lack of crystals.

As Thorne acknowledges, the words of the prosecution history are a part of the "intrinsic evidence" that the Court must consider. (Dkt. 54, at 3) (*citing Phillips v. AWH Corp.*, 415 F.3d 1303, 1314, 1317 (Fed. Cir. 2005)) Because Thorne's proposed construction is contradicted by statements in the prosecution history, it cannot be correct.

The measurement by light microscope at 640x magnification, which is a method of measurement mentioned in the patent specification, is but one method for determining whether or not crystals are present. As the statements in the prosecution history make clear, that method is but an example--and a non-limiting example--since the defined meaning of "non-crystalline" is a "complete lack of crystals." (Ex. D of opening brief, Non-Final Rejection dated July 22, 2010, at 7)

Thorne argues that its construction should be adopted because "[a]ny other construction would impermissibly imbue the patent scope with uncertainty." (Dkt. 54, at 5) But there is no

uncertainty in XYMOGEN's proposed construction -- "Non-crystalline" means an absolute lack of crystals. One crystal in the composition would make the composition non-infringing. There is no uncertainty as to the scope of the claims. Thorne seems to be conflating uncertainty in patent scope or definiteness of the claims, with difficulty in proving infringement. That the interpretation Thorne used in order to get its patent issued at the Patent Office now leaves it with an infringement problem is an issue of its own making, and is in any event irrelevant at the claim construction stage.

The same confusion was present in *SmithKline* when the Federal Circuit reversed a lower court's construction that limited the claimed chemical "PHC hemihydrate" to "PHC hemihydrate in commercially significant amounts." *SmithKline Beecham Corp. v. Apotex Corp.*, 403 F.3d 1331, 1335, 1346 (Fed. Cir. 2005) The lower court inserted the "in commercially significant amounts" language into the claim construction because, *inter alia*, the court believed that the claim would be "indefinite if construed to cover undetectable trace amounts of PHC hemihydrate." *Id.* at 1340. But the Federal Circuit disagreed, holding that claim was not indefinite because it recited "in clear terms a discernible chemical structure" and that the "test for indefiniteness does not depend on a potential infringer's ability to ascertain the nature of its own accused product to determine infringement." *Id.* at 1340-41.

This case is analogous. There is nothing indefinite about the plain meaning of "non-crystalline." One of ordinary skill in the art understands the meaning of non-crystalline to mean an absolute lack of crystals as evidenced by the public record of the interaction between the examiner and the applicant during prosecution of the '888 Patent. Since the plain meaning of the term "non-crystalline" is definite there is no necessity, as Thorne argues, to link the meaning of

"non-crystalline" to "the test method described in the patent." (Dkt. 54, at 5) Thorne argues that linking the construction to a test method is necessary because otherwise the claims would be allowed to have "some unknown detection limit." (*Id.*) Yet the *SmithKline* court has squarely rejected this type of argument, holding that claims can be interpreted to cover "even a single undetectable crystal." *SmithKline*, 403 F.3d at 1335.

Thorne also argues that because the '888 patent "expressly sets forth the test method," it follows that the meaning of non-crystalline "must be linked to the test method described in the patent." (Dkt. 54, at 5) Thorne cites no not a single bit of authority for the proposition that because one possible test method is disclosed in a patent that same test method "must" be used in construction of an associated claim term.

But the core problem with a construction that links the meaning of non-crystalline to a particular method of detection is that such a construction is inconsistent with the prosecution history. The applicant agreed with the examiner's interpretation of "non-crystalline," and indeed used that construction to argue that the Udel prior art was not invalidating. It cannot now backtrack on its agreement in the public record that non-crystalline means an absolute lack of crystals.

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III. CARRIER OIL

Term	XYMOGEN'S Proposed Construction	Thorne's Proposed Construction
"carrier oil"	An oil that carries CoQ10 molecules in the passive facilitated diffusion process across absorptive cells in the intestine.	An oil ¹ that increases the volume of an individual dosage of CoQ10 delivered into the intestine of the human taking the present invention, which increases the overall surface area from which the CoQ10 can be absorbed.

Nowhere in Thorne's proposed construction of "carrier oil" is there a requirement that the carrier oil carry anything. For that reason alone, Thorne's proposed construction must be rejected. *Enzo Biochem Inc. v. Applera Corp.*, 780 F.3d 1149, 1154 (Fed. Cir. 2015) (the District Court's construction "read out" a claim phrase and impermissibly broadened the claim) ((*citing Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) ("Claims are interpreted with an eye toward giving effect to all terms in the claim.")).

Thorne's proposed construction only requires that the oil increase the volume of an individual dosage, which, according to Thorne's construction, will have the effect of increasing the overall surface area from which CoQ10 can be absorbed. Thorne does not explicitly state what increasing the volume of an individual dosage entails but arguably *any* oil added to the composition will increase the volume of the individual dosage: if any oil is added to the dosage that oil will contribute to the overall volume of the dosage; and therefore adding any oil will by definition increase the volume.

¹ Thorne's original proposed construction was "a material" as discussed in XYMOGEN's opening brief. Thorne has now changed "material" to "oil."

The fact that any oil could satisfy Thorne's proposed construction reads out the claim term "carrier"; impermissibly broadens the claim; and does not interpret the claims with "an eye toward giving effect to all terms in the claim." (*Id.*)

The plain meaning of the word "carrier" is "one that carries." (*See* Merriam-Webster Online Dictionary) Thorne's construction interprets "carrier" as meaning increasing the volume of an individual dosage. Thorne's construction is not consistent with any plain meaning of the word "carrier" as interpreted in light of the specification. *Markman v. Westview Instruments*, *Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc). Since the applicant in this case did not act as his own lexicographer to change the ordinary meaning of "carrier" (and Thorne has not so argued), adopting Thorne's construction would rewrite the claim language. *Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1383 (Fed. Cir. 2008) ("Court cannot rewrite claim language.") (*citing K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999) ("Courts do not rewrite claims; instead, we give effect to the terms chosen by the patentee."); *Tex. Instruments, Inc. v. U.S. Int'l Trade Comm'n*, 988 F.2d 1165, 1171 (Fed. Cir. 1993) ("[C]ourts can neither broaden nor narrow claims to give the patentee something different than what he has set forth.") (internal quotes omitted)).

Thorne justifies its proposed construction as being "taken directly from the '888 patent." (Dkt. 54, at 6) But since Thorne's construction makes the claim term "carrier" superfluous, it must be rejected. In contrast, as explained in XYMOGEN's opening brief, XYMOGEN's construction gives meaning to claim language "carrier," properly interprets "carrier" in light of the specification, and should be adopted by the Court.

IV. CONCLUSION

Thorne made a bargain with the Patent Office: in exchange for the patent grant, it gave up claim scope covering any composition that had *any* crystals. That cannot now be reversed. Similarly, it bargained with the Patent Office not for an "oil," but for a "carrier oil." It cannot now read out the word "carrier" merely because that would be convenient for its infringement case. Thorne's legal arguments are unsupported by any case law.

This Court should adopt XYMOGEN's proposed constructions which, as set out in XYMOGEN's opening claim construction brief, are supported by the both the plain and customary meaning of these terms as they would be understood by a person of ordinary skill in the art, and comport with the well-established principles of law that govern claim construction.

DATED this 15th day of June, 2015.

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CERTIFICATE OF SERVICE

I hereby certify that on the 15th day of June, 2015, I electronically filed the foregoing **ATLANTIC PRO-NUTRIENTS, INC., D/B/A XYMOGEN'S RESPONSIVE CLAIM**

CONSTRUCTION BRIEF with the Clerk of the Court using the CM/ECF system, which sent notification of such filing to the following:

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